

What is the Most Effective Way to Measure Sexuality? The Utilisation of a New Method


For PsyPAG 30th Anniversary Annual Postgraduate Student Conference, 22 – 24th July, 2015,
University of Glasgow

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What am I going to talk about?

- 
- Why sex interest research?
 - Sex interest measures & evaluation
 - Introduction of a new measure
 - Testing and evaluation of a new measure
 - Future directions

Why sex interest research?

- Not greatly researched in terms of typical sexuality
- Important and current!
 - Caitlyn Jenner
 - Marriage equality in the UK in March 2014 & USA in June 2015
- Extrapolation to deviant sexual interest
 - Single strongest predictor of sexual offense recidivism, especially in CSOs (Kanters et al., 2014)

How do we measure sex interest?

○ **Subjective**

- Questionnaires
- Card Sorts
- Interviews

○ **Objective**

- Phallometry (PPG)
- Thermography
- Heart Rate/Galvanic Skin Response
- Pupillometry
- Eye-tracking (& viewing time)

○ **Indirect**

- Implicit Associations Test (IAT)
- Implicit Relational Assessment Procedure (IRAP)
- Choice Reaction Time (CRT)
- Rapid Serial Visual Processing (RSVP)
- Emotional Stroop

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Subjective

Influenced by observer's personal judgement.
Open to interpretation and opinion.

Self-Report

Questionnaires



Rich and detailed information



Assumes the information required is consciously accessible (*Snowden et al., 2011*) – sexuality is complex!



Sensitive topic, so prone to socially desirable responding (*Meston et al., 1998*)

Objective

Involves impartial measurement, that is, without bias or prejudice.
Not subject to personal opinion.

PPG (Penile Plethysmography)

Measures penile blood flow in response to stimuli using a rubber gauge



Current 'gold standard' in sexuality research (*Fromberger et al., 2012*)



Very invasive and in some countries (e.g. Germany) it is seen as unethical so is prohibited (*Babchishin et al., 2013*)



Assuming that erection equates to sexual arousal – not always the case! (*Janssen et al., 2008*)



Prone to faking behaviours! (*Trottier et al., 2014*)

Indirect Measures

Self-assesses an attribute based on another response *(De Houwer & Moors, 2010)*

IAT

- Based on the premise that RTs will be faster for internal beliefs
- Two concepts ascribed to the same computer key – related concepts will produce faster RTs and reveal individual's beliefs

CHILD

Or

SEXY

Category

ADULT

Or

NOT SEXY

Attribute

BREASTS

A

L

IAT - Evaluation



Been shown to precisely identify sexuality (*Snowden et al., 2008*)



Prone to 'faking behaviours' (*Gray & Snowden, 2009*)



Become habituated to stimuli that are presented many times & new stimuli automatically draw more attention (*Gress & Laws, 2009*)



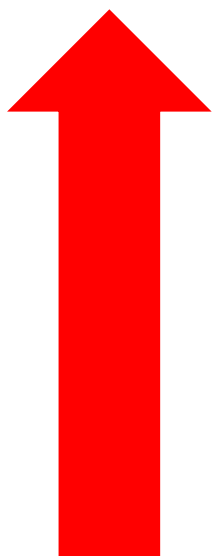
Association between children and sex cannot be said to be definitive proof of abnormal sex interest in children (*Snowden et al., 2011*)

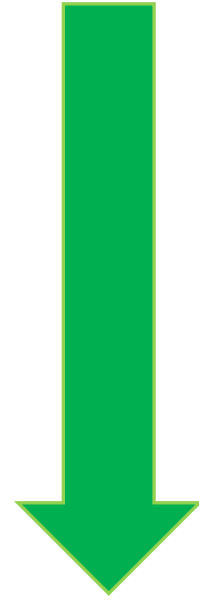
Summary

- Sex interest assessment isn't very good!
- Need a more comprehensive measure
- What can be done?

Multimodal Tablet for Assessing Sexual Interest (M-TASI)

- Tablet measure based on approach-avoidance procedures
- 'Swipe' image towards or away from you to indicate like and dislike, respectively
- Faster RTs to pull 'liked' image towards you ('approach') and push 'disliked' image away ('avoidance') than the reverse





Method

Participants

~~30~~ ~~28~~ ~~25~~ **19** (6 male, 13 female)

Materials

- Sexuality questionnaire with 3 sexuality measures
- Samsung Galaxy Tab S running OpenSesame and 30 grayscaled catalogue model stimuli from 3 age groups

Procedure

- Counterbalanced across conditions
- Practice phase & experimental phase
- Around 30 minutes long, depending on participant response rate

Details of Data Analysis & Results

Repeated measures ANOVAs were conducted for each of the dependent variables:

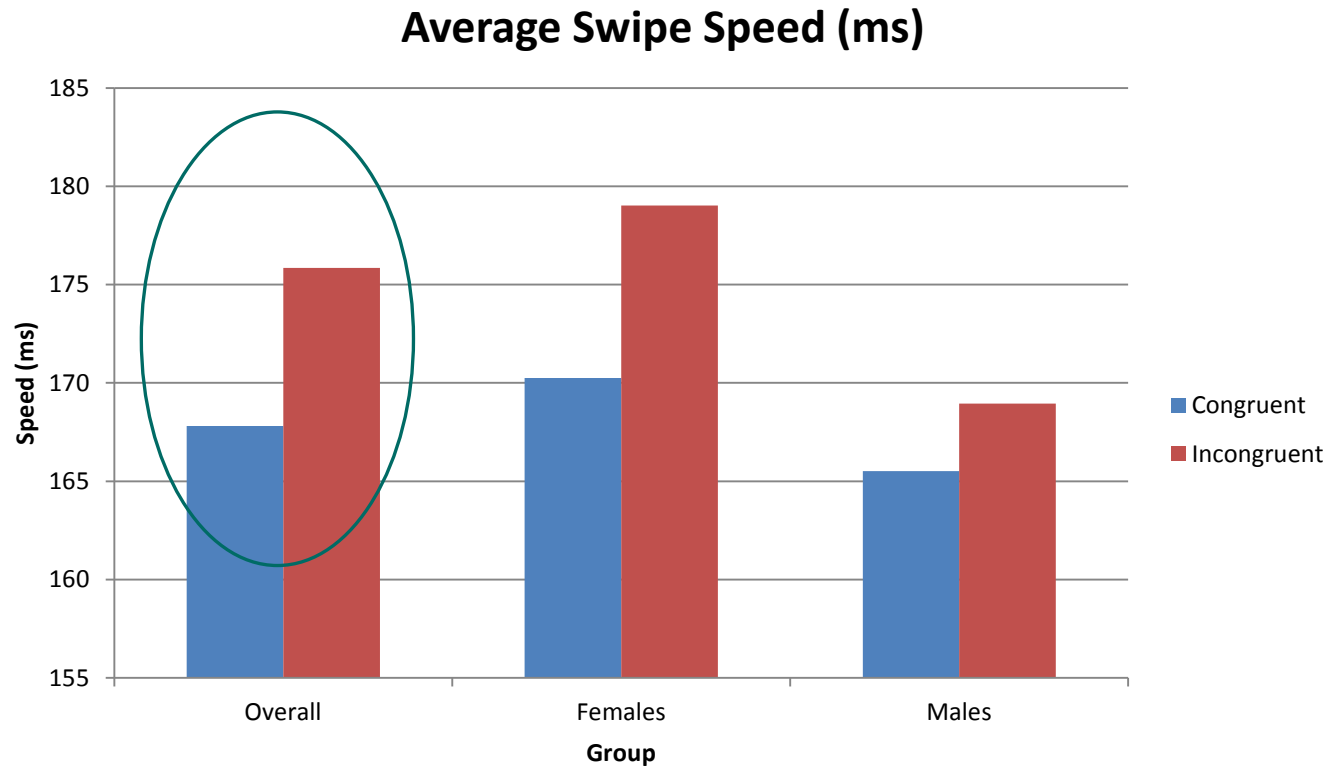
- Swipe speed
- Reaction Time
- Response Given
- Touch Data

And then paired samples t-tests were used for post-hoc analysis.

Results!

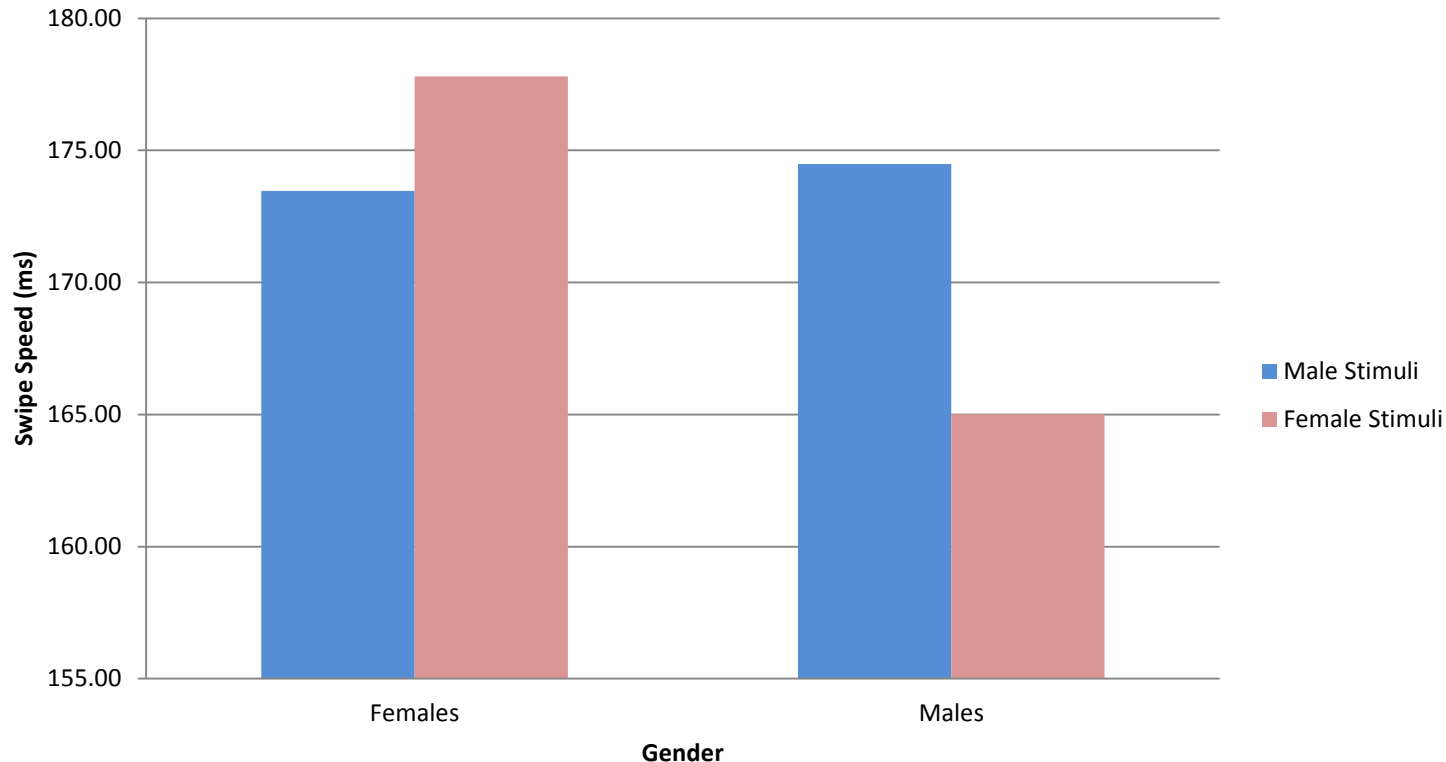
Swipe Speed

How fast, in ms, the participant 'swipes' the image after it has been presented to them on the screen.



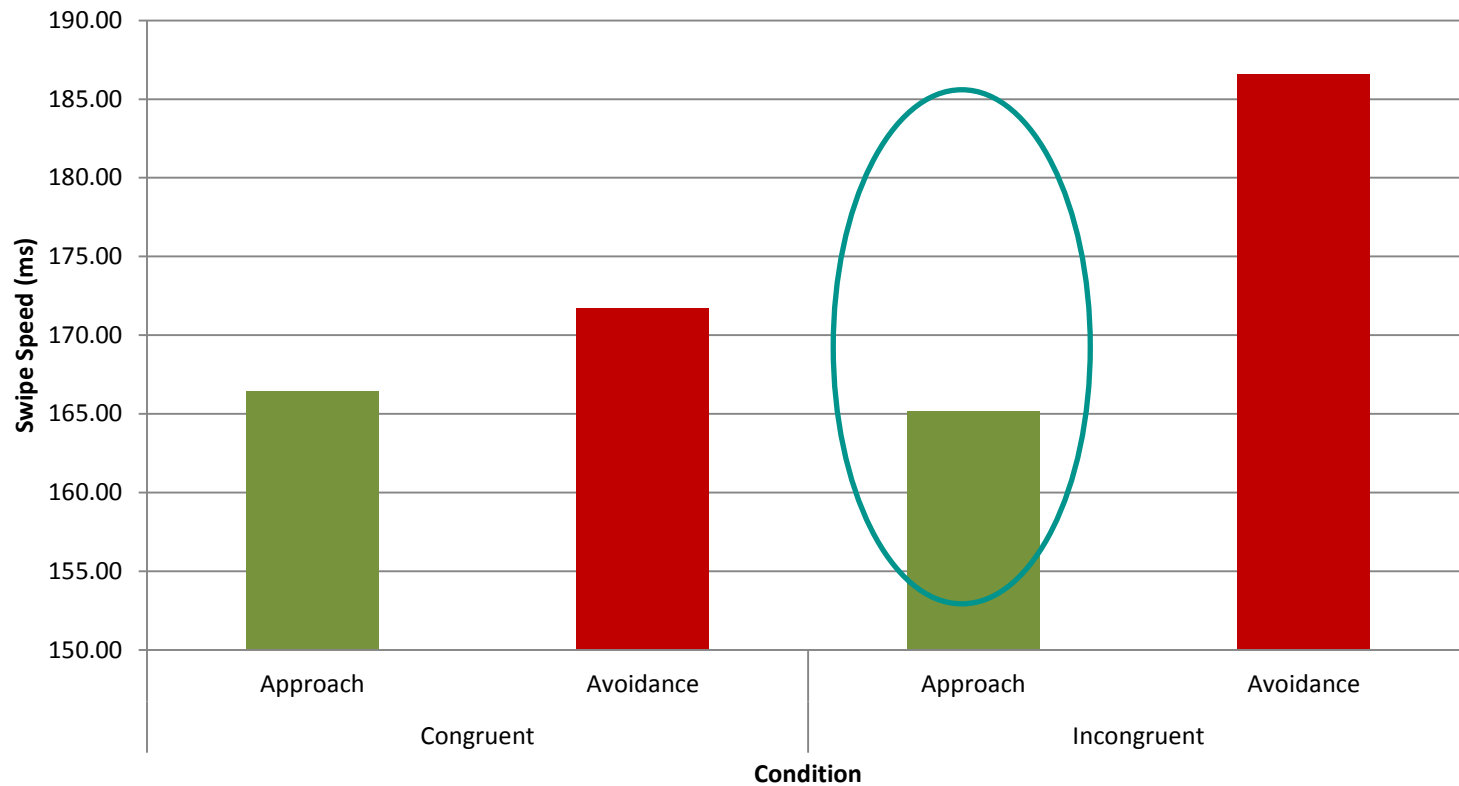
Effect of condition was significant ($F(1, 17) = 6.276, p < .05$)
NS effect of gender!

Average Swipe Speed (ms) for Male and Female Stimuli



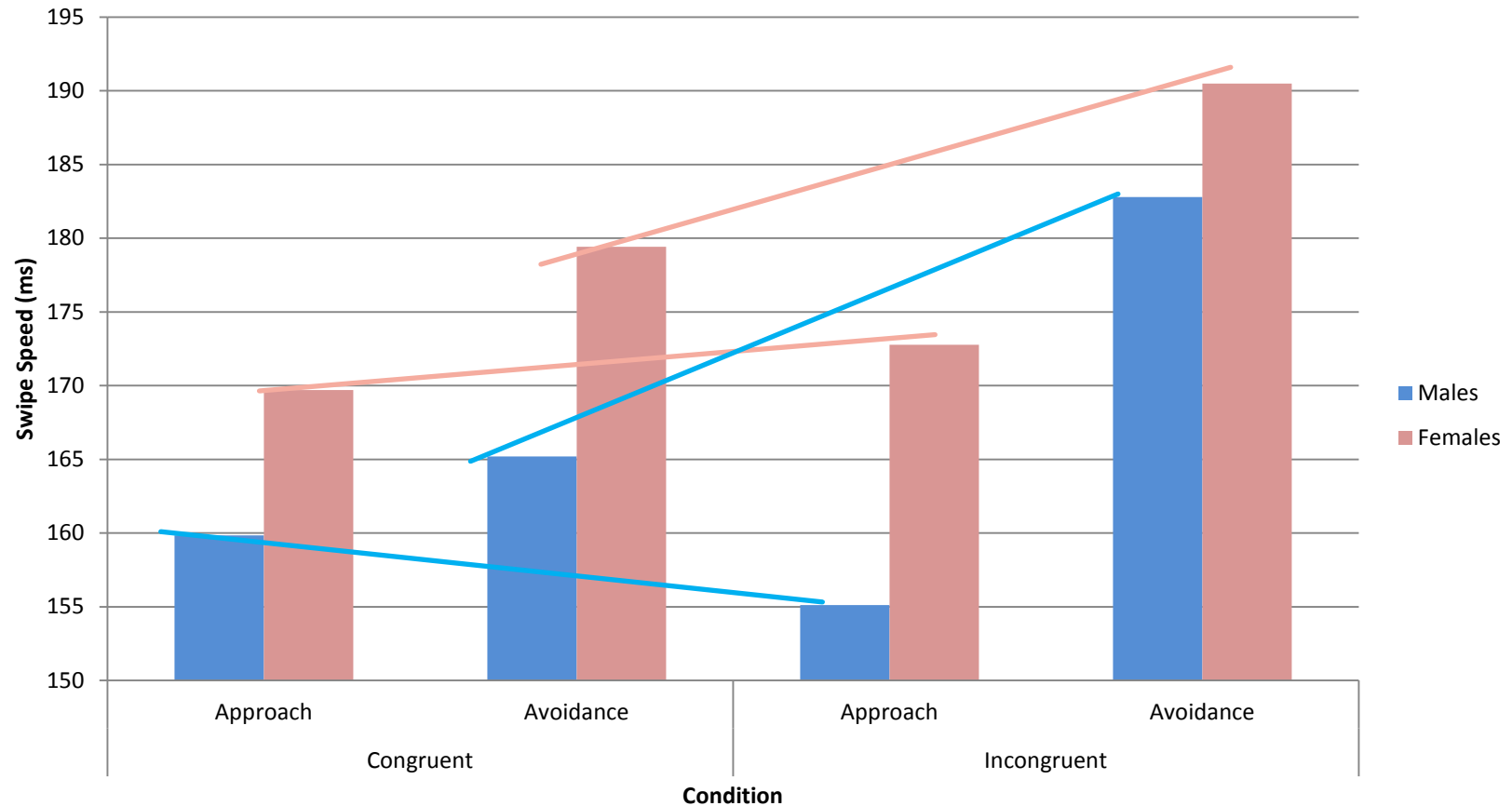
Significant interaction for Picture Gender and Gender ($F(1, 17) = 84.201, p < .000$), meaning they were faster for preferred gender

Average Swipe Speed (ms) for Approach-Avoidance



Paired samples t-test showed NS difference for *both* approach and avoidance

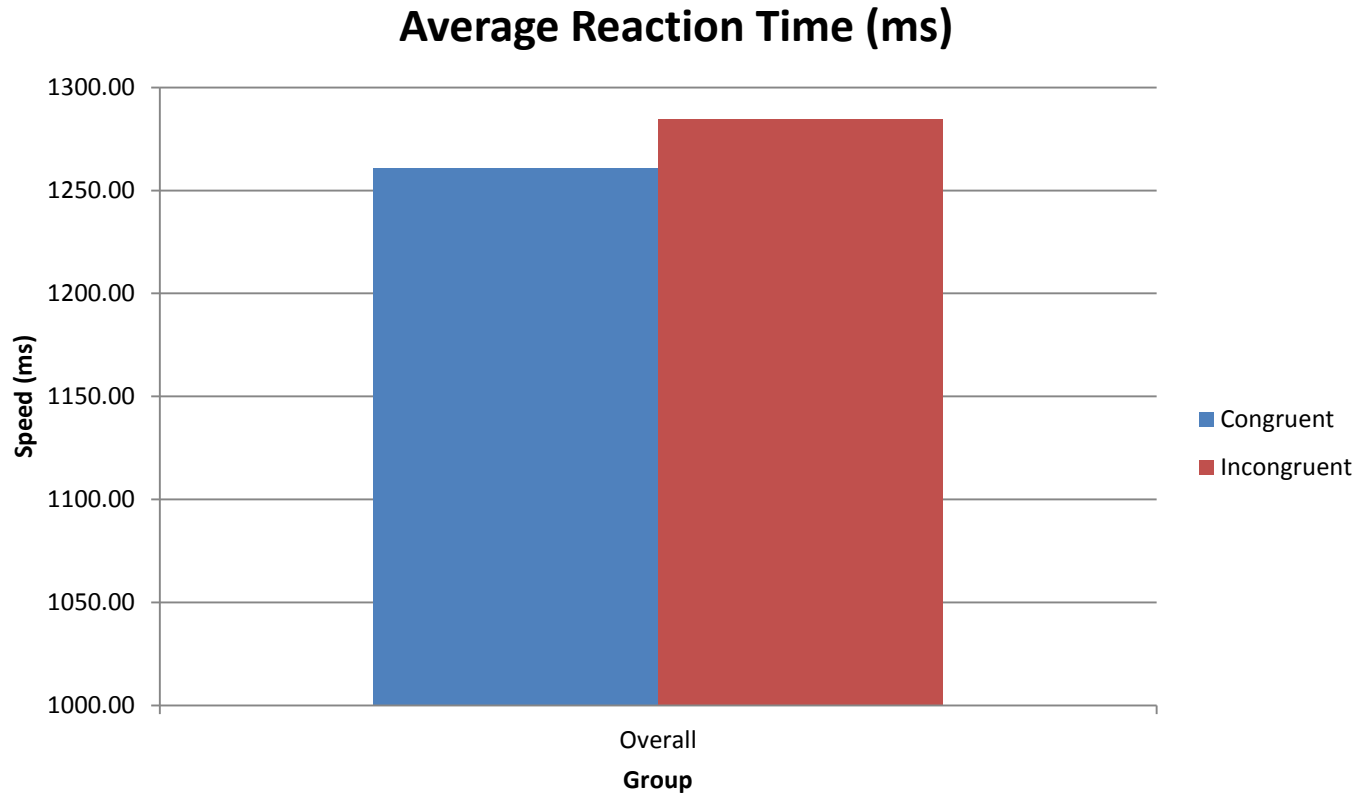
Average Swipe Speed (ms) - Divided by Gender



Males show quicker approach patterns in the incongruent condition, perhaps due to habituation

Reaction Time (“*RT*”)

How fast, in ms, the participant reacts to the image presented on screen (from presentation to first touch).

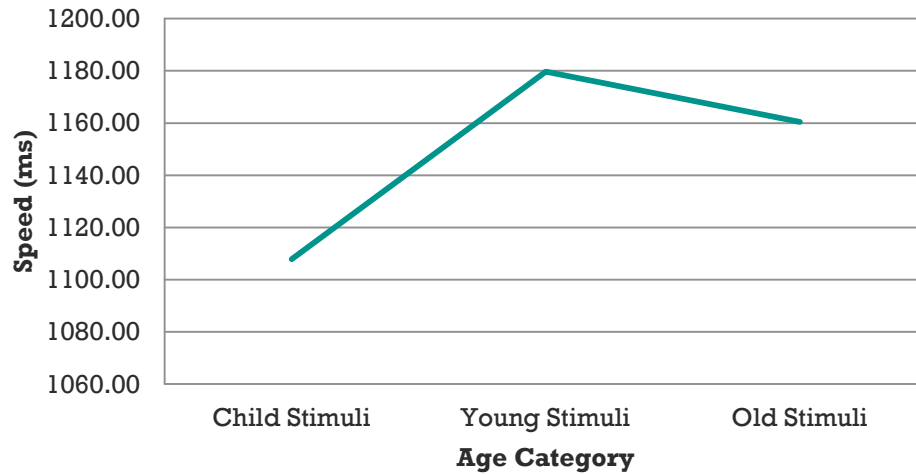


Condition was NS

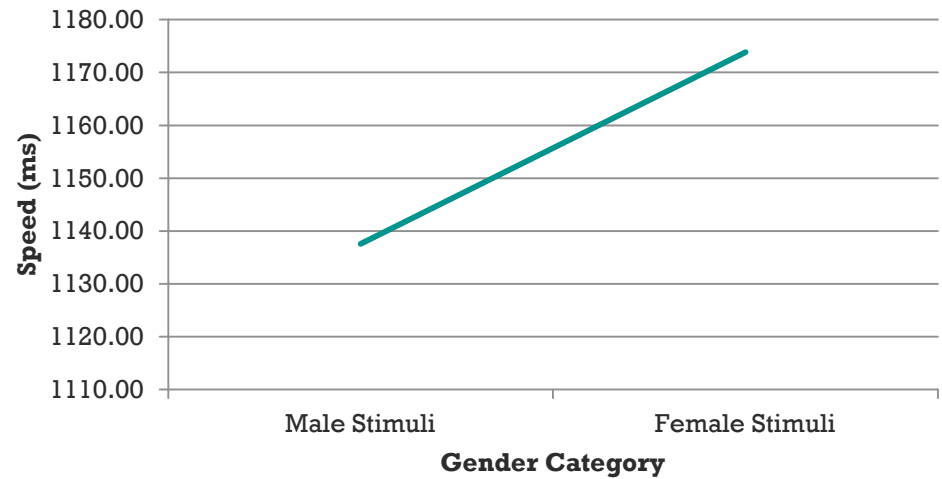
Effect of picture age was significant ($F(2, 34) = 18.496, p < .000$)

Effect of picture gender was significant ($F(1, 17) = 8.803, p < .005$)

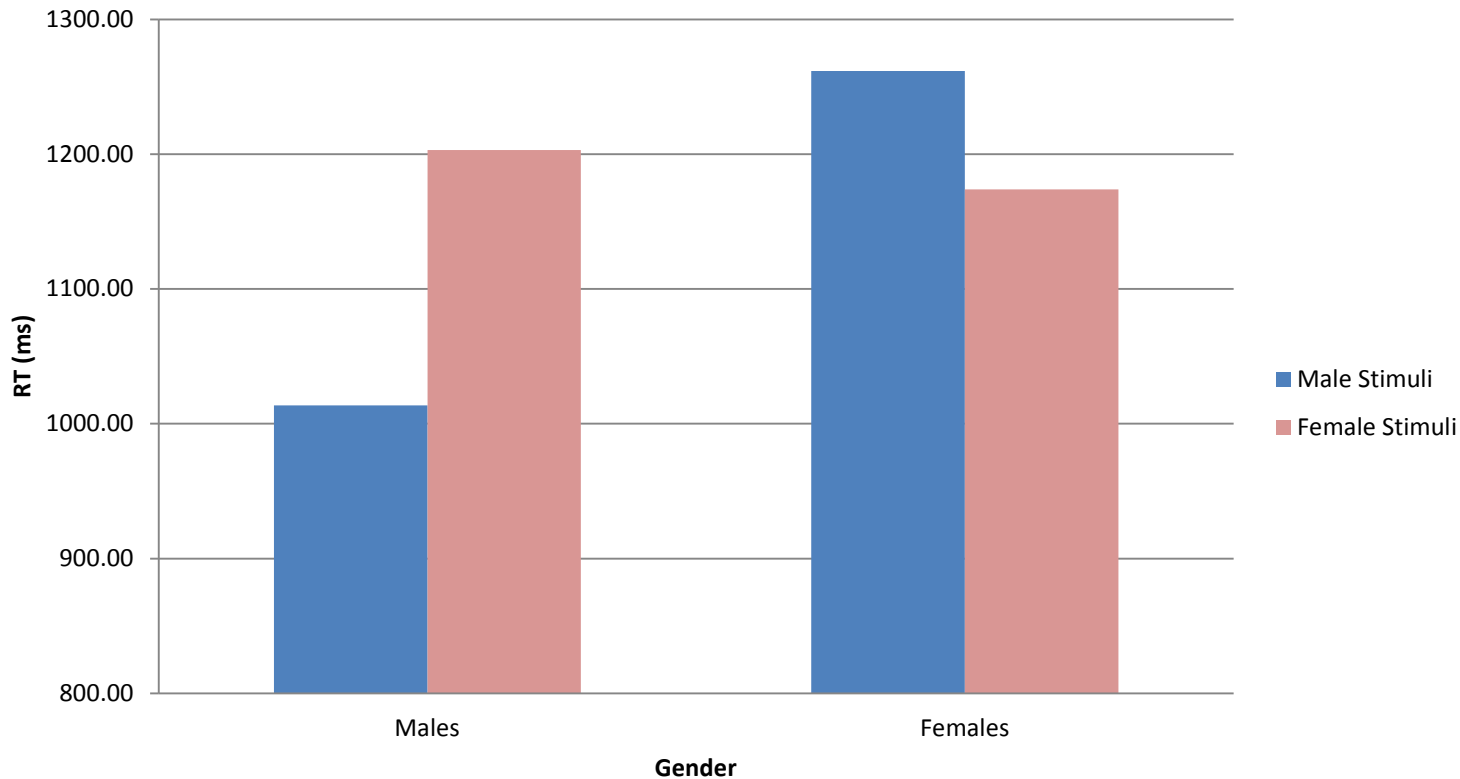
Difference between Stimuli Age



Difference between Stimuli Gender



Average Reaction Time (ms) for Male and Female Stimuli

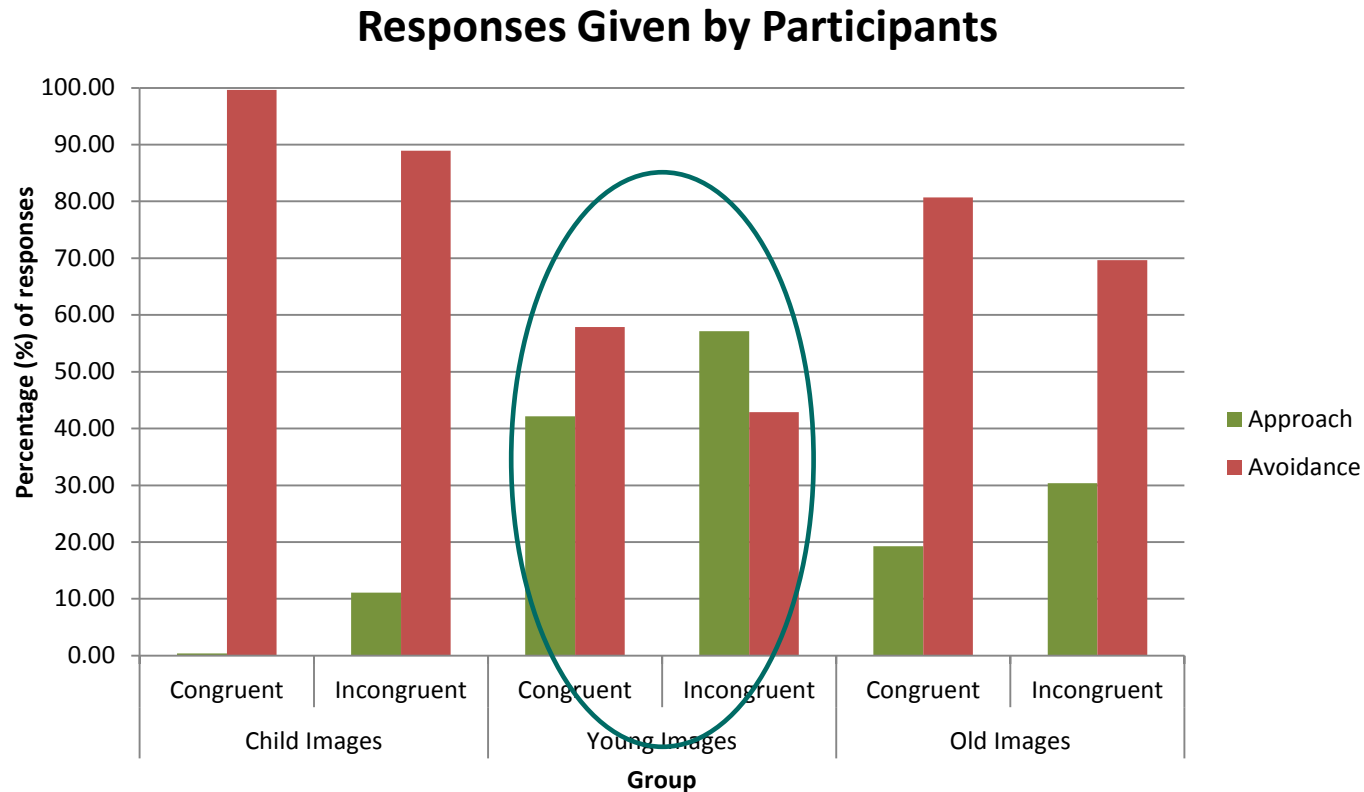


NS effect of gender, but significant interaction between Picture Gender and Participant Gender ($F(1,17) = 42.358, p < .000$)

Perhaps because of SCID – delay in responding to sexually attractive stimuli

Response Given

The 'approach' or 'avoidance' response given by the participant i.e. did they like it or not.

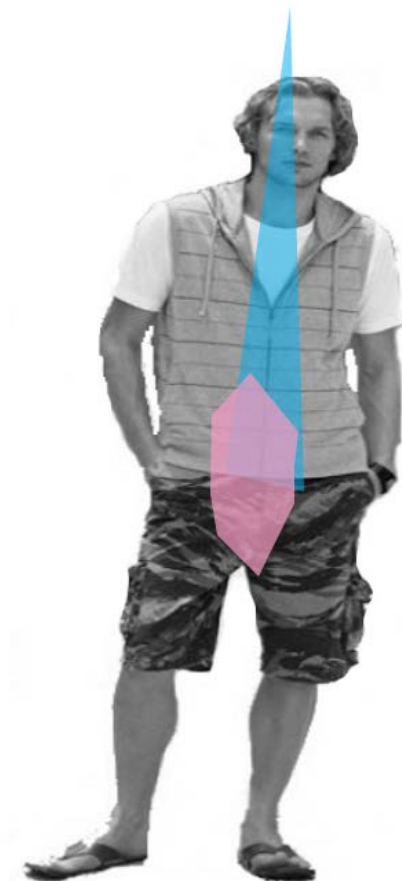


Overall, effect of condition was NS, meaning few errors were made

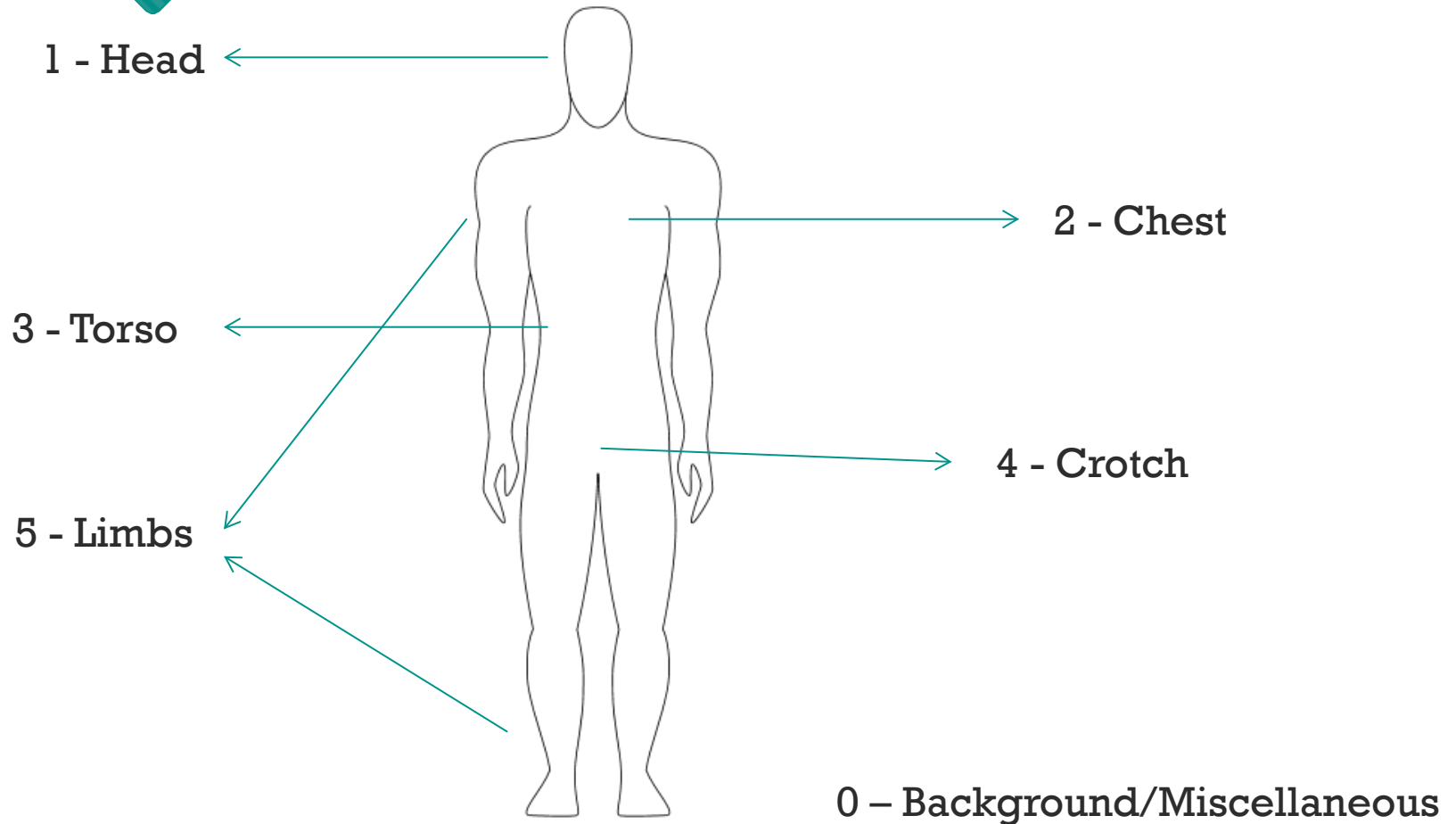
Effect of picture age was significant ($F(2, 34) = 26.884$, $p < .000$)

Touch Data

Where on the image, in coordinates, the participant touches.



Touch Data – *Coding*





 Female stimuli

 Male stimuli

Discussion

What have we learned?

- Men have an odd 'approach' pattern that is skewing the data
 - Habituation – 67% males did congruent condition first vs. 38% women; faster as they had already seen the pictures?
- Slower RTs for preferred gender, possibly due to SCID, consistent with other research
- Young images 'approached' most and gained slowest RTs – most appropriate for the age group
- Men and women don't 'touch' images differently – this cannot distinguish sexual preferences
- **More testing needs to be done!**

Future Directions

- Currently recruiting for Part B of the pilot
 - Testing use age appropriate erotic and non-erotic images
 - Assessing for resilience to faking
- Plans for the main study already in place
 - Large repeated measures design
 - Comparison between different, already-established sex interest measures

Thank you!

Questions?

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